

#### ABSTRACT

The invention relates to a combined cooling plant/heat pump for use in motor vehicles for the cooling, heating and dehumidification of the vehicle interior. A refrigerant circuit is thermally coupled to the ventilation system over an internal heat exchanger having two functional units. The functional units are switchable as the condenser/gas cooler of the heat pump (in heating operation) and as the evaporator of the cooling plant (in cooling operation). In a combined dehumidification-reheating operation, one of these functional units is operable as an evaporator and the other as condenser/gas cooler.